

**REMARKS**

The claims have been amended based on the disclosure at, e.g., page 7, lines 7-8, page 11, lines 15 and 29, and page 12, line 3 in the specification, and to make editorial changes. Claims 4, 8 and 9 have been canceled.

Entry of the above amendment is respectfully requested.

**Rejection under 35 U.S.C. 112, First Paragraph**

On page 2 of the Office Action, claims 1-2, 4-5, and 7-10 are rejected under 35 U.S.C. 112, first paragraph, because the specification allegedly for does not reasonably provide enablement for any type of polycarbonate decomposition having any amounts or conditions thereof.

In response, and to expedite allowance, Applicants have amended the claims to recite that the polycarbonate is obtained from 2,2-bis(4-hydroxyphenyl)propane. Also, the claims have been amended to recite pressure and temperature ranges fully supported and enabled by the specification, including the Examples. Since the polycarbonate is limited as described above, Applicants submit that it is apparent that the amount of the polycarbonate can be easily determined by people having ordinary skill in the art with reference to the Examples without undue experimentation.

Thus, Applicants submit that the present invention satisfies the requirements of 35 U.S.C. 112, first paragraph, and withdrawal of this rejection is respectfully requested.

**Provisional Obviousness-Type Double Patenting Resection**

On page 3 of the Office Action, claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting over claims 1 and 3 of Application No. 10/451779.

In response, Applicants note that Application No. 10/451779 has been abandoned, and thus this provisional rejection is moot. Accordingly, withdrawal of this provisional rejection is respectfully requested.

**Art Rejections over USP 6255529**

On page 4 of the Office Action, claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by USP 6255529. Further, on page 6 of the Office Action, claims 2, 4-5, and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 6255529.

In response, Applicants submit that USP 6255529 (Nagase et al.) fails to disclose or suggest the decomposition of a specific polycarbonate obtained from 2,2-bis(4-hydroxyphenyl)propane.

Nagase et al. merely disclose a reaction temperature higher than 100°C to up to 400°C and a reaction pressure higher than 5 MPa to up to 40 MPa in column 4, line 62 to column 5, line 6.

According to the invention in amended claim 1 of the present application, when an aromatic polycarbonate obtained from 2,2-bis(4-hydroxyphenyl)propane is decomposed with water in a supercritical or subcritical state at an ion product of  $10^{-17}$  ( $\text{mol}^2/\text{kg}^2$ ) or less, a temperature of 374 to 430°C and a pressure of 18 to 30 MPa, there is provided a remarkable

effect that 2,2-bis(4-hydroxyphenyl) propane is obtained at a high recovery rate (90 % or more) (see Examples 1-3 of Table 1).

Finally, with respect to claim 10 in particular, Applicants note that "1 wt% or less" was corrected to "1 wt% or more" in the Amendment under PCT Article 19 (supported by the disclosure at page 14, line 3). However, Applicants note that at page 9 of the outstanding Office Action, "1 wt% or less" still remains, so Applicants are bringing this point to the Examiner's attention.

In view of the above, Applicants submit that the present invention is neither anticipated by nor obvious from Nagase et al. Accordingly, withdrawal of these rejections is respectfully requested.

### **Obviousness Rejection over USP 6331320**

On page 10 of the Office Action, claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 6331320.

In response, Applicants note initially that claim 1 has been amended to recite a polycarbonate decomposition method comprising decomposing an aromatic polycarbonate obtained from 2,2-bis(4-hydroxyphenyl) propane with water in a supercritical or subcritical state at an ion product ( $K_w$ ) of  $10^{-17}$  mol<sup>2</sup>/kg<sup>2</sup> or less at a temperature of 374 to 430°C and at a pressure of 18 to 30 MPa to form 2,2-bis(4-hydroxyphenyl) propane as a dihydroxy compound component of the aromatic polycarbonate.

Applicants submit that USP 6331320 (Nakahara et al.) does not teach or suggest all of the particular features of amended claim 1. That is, Applicants submit that it is clear from a

comparison between the disclosure of Nakahara et al. and the invention of the present application that the invention of the present application is not obvious over Nakahara et al.

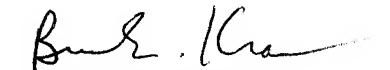
Thus, Applicants submit that the invention as recited in the amended claims is not obvious over Nakahara et al., and withdrawal of this rejection is respectfully requested.

### **Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

  
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